

Please add the following new claims:

- a1
27. (new) The composition of claim 1, wherein polymer (A) is other than a polyacrylate.
28. (New) The composition of claim 1 wherein the (A) consists essentially of polyisobutylene.

### Remarks

Claims 1-28 are now pending in the application. Claims 27 and 28 have been added with this amendment. The new claims are believed to wholly supported in the specification and claims as originally filed. More Specifically, the new claims are supported in the specification at page 5, line 28-33. Entry of the amendment is respectfully requested.

Claims 1-26 stand rejected under 35 U.S.C. § 103 as being obvious over Tipton et al (U. S. Patent 4,594,378). The rejection states that Tipton et al teaches polymeric compositions which have improved shear stability in transmission and hydraulic fluids while maintaining high and low temperature viscosity characteristics. The rejection states that Tipton teaches a mixture of (A) at least one oil-soluble polymer, which can be a homopolymer of C<sub>3-20</sub> olefins, (B-1) nitrogen containing ester of a carboxy-containing interpolymer and/or (B-2) an acrylate polymerization product of an acrylate ester. The rejection states that (A) and (B-2) encompass component (A) of the instant claims. The rejection also states that Tipton et al allows the addition of conventional additives. The rejection states that the conventional additives encompass Applicants' components (C), (D), and (E).

Applicants have added claims directed to polymer (A) which are other than polyacrylates (claim 27) and which consists essentially of polyisobutylene (claim 28). Additionally, Applicants claims are directed to lubricating compositions comprising at least about 30% by weight of at least one mineral oil, having a kinematic viscosity of less than about 8 cSt at 100°C, (A) from about 15% to about 40% by weight of at least one polymer, and (B) up to about 30% by weight of at least one fluidizing agent, provided

that when the fluidizing agent is a poly $\alpha$ -olefin having a kinematic viscosity from about 2 to, about 30 cSt at 100°C, then the poly $\alpha$ -olefin is present in an amount up to about 12% by weight, wherein the lubricating composition has a shear loss of less than about 15% in the 20 hour taper bearing shear test.

The components of the claimed lubricating compositions provide good shear stability even under the more severe taper bearing shear test. These components provide a lubricating composition which provides less than 20% shear loss in the taper bearing test. Shear loss is dependent test method used. Previously, patents have reported shear loss using tests of less severity than the taper bearing test. An example of such test is the sonic shear test. The present combination of components provides good low and high temperature properties especially when used in combination with one or more mineral oils. In one aspect, the compositions provide improved oxidation resistance. The taper bearing shear loss test is a severe shearing test.

Tipton et al does not define shear stability by any given test. Tipton fails to establish the type of testing used to determine the shear stability of his formulations. Applicants' claims are directed to lubricating compositions which provide a specific value in one of the most severe shear stability test, namely the taper bearing test.

Further, there is no teaching in Tipton et al which would lead a skilled person to the specific combination of additives required by Applicants's claims. Applicants have discovered a balance of additives which provide good shear stability in the most severe test and also provide good high and low temperature viscometrics.

Tipton et al does not teach or suggest the levels of the additives required in Applicants' claims. The levels of the polymer claimed are higher than those suggested by the examples of Tipton. A person skilled in the art would look to all of the Tipton patent an be lead to lower levels than hose claimed.

Tipton et al contains no teaching to the base fluids used in preparing the formulation. Applicants claims require that the oil of lubricating viscosity has a specific viscosity, e. g. less than about 8 cSt at 100°C. This type of oil of lubricating viscosity is thinner than most oils used in lubricants, such as gear oils. To provide the proper

viscometrics, more polymer is needed. The higher level of polymer adversely affects the low temperature properties and the shear stability of the lubricating composition. Tipton et al Examples D-F use a lower viscosity oil (100 N mineral oil) but the level of polyisobutylene is much lower (4.24, 6.52, and 4.89) than the required amounts of Applicants' claims (from about 15% to about 40% by weight). Tipton et al fails to teach or suggest an additive combination which can provide the proper viscosity using a lower viscosity oil of lubricating viscosity, e.g. less than about 8 cSt.

Since Tipton et al fails to provide guidance to a skilled person which would motivate them to alter the lubricants of Tipton et al to make the lubricating compositions of Applicants' claims, Applicants submit that Tipton et al does not render obvious their claims. Applicants request withdrawal of the rejection and allowance of the claims.

Accordingly, applicants request withdrawal of the rejection and allowance of the claims. In the event any issues remain in the prosecution of this application, Applicants request the Examiner call the undersigned attorney to expedite allowance of the claims. If any fees are required for the filing of these papers, Applicants request the Commissioner to charge those fees to deposit account #12-2275.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, P.L.L.

By William C. Tritt  
William C. Tritt  
Reg. No. 32,510

1621 Euclid Avenue  
Nineteenth Floor  
Cleveland, Ohio 44115  
(216) 621-1113